

JOB DESCRIPTION

JOB TITLE: Junior Engineer

DEPARTMENT: Public Works Department

REPORTS TO: Senior Civil Engineer DATE: April, 2009

EMPLOYEE UNIT: AFSCME Supersedes: August, 1997

FLSA EXEMPT: No

JOB SUMMARY: Under the direct supervision of the Senior Civil Engineer, the Junior Engineer performs a variety of professional civil engineering work related to all aspects of municipal engineering function; performs related work as required.

CLASS CHARACTERISTICS: Junior Engineer is the entry level class in this professional engineering series. Initially, work is clearly defined and performed under close review. As experience and proficiency are gained, assignments become more difficult and performed with greater independence. This class is distinguished from the Assistant Engineer class, which is the journey level of the professional engineering series, capable of working with minimal supervision on assigned projects or as part of a team on a larger project.

The City of Morgan Hill is an AFSCME agency shop. Members of this class must either join AFSCME or pay an agency fee in lieu of membership.

ESSENTIAL DUTIES AND RESPONSIBILITIES: The following duties are performed personally, in cooperation with the Senior Civil Engineer, and/or in coordination with other City staff and community groups. Additional duties may be assigned.

- 1. Design and detail structures, utility facilities, roadways, site improvements and various public works projects.
- 2. Oversee development of construction drawings for accuracy and conformance with design requirements.
- 3. Act as project engineer of construction projects of moderate difficulty.
- 4. Inspect the construction of engineered facilities for conformity with plans and specifications.
- 5. Direct the work of technical staff on specific projects.
- 6. Conduct studies and use computer programs to solve specific engineering problems.

- 7. Maintain accurate records and prepare clear and concise reports, correspondence and other written materials related to the work.
- 8. Prepare cost, labor, material, and work day estimates for construction projects.
- 9. Compile and compute engineering data and statistics.
- 10. Review plans submitted by developers for conformance to design and technical standards.

QUALIFICATION REQUIREMENTS: To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. Requirements listed below are representative of the knowledge, skill, and/or ability required.

Education & Experience:

- 1. Graduation from an accredited college or university with a Bachelor's degree in Civil Engineering.
- 2. Related work experience is desired, but not required.

Licenses & Certificates:

- 1. Possession of a valid California Class C driver's license in compliance with adopted City driving standards.
- 2. Possession of an Engineer-In-Training Certificate accepted by the State of California may be substituted for a Bachelor's degree.

Other Requirements:

- 1. Must have sufficient mobility to inspect construction projects in the field.
- 2. Must be willing to work out of doors in various weather conditions.

Knowledge of:

- 1. Civil engineering principles and practices with particular reference to public works projects.
- 2. Methods and materials used in the construction of public facilities.
- 3. Engineering mathematics through calculus.
- 4. Basic surveying, drafting and materials testing techniques.
- 5. Data processing principles as applied to the solution of engineering problems.

Skill in:

- 1. Applying civil engineering principles to the solution of engineering problems.
- 2. Interpreting and preparing drawings, maps, graphs, specifications and compilation of numerical data.
- 3. Maintaining accurate records and preparing clear and concise reports.
- 4. Preparing engineering studies and evaluations.
- 5. Use of common office software including Microsoft Office and applicable specialized engineering software.
- 6. Providing outstanding customer satisfaction (internally and externally).

Ability to:

- 1. Quickly learn the policies and procedures pertaining to the work.
- 2. Manage multiple construction or plan checking projects.
- 3. Establish and maintain working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS: Physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- 1. While performing the duties of this job, the employee is regularly required to talk or hear. Employee frequently is required to sit, stand, walk, use hands and fingers to handle or feel objects, tools, or controls; reach with hands and arms; climb or balance; stoop, kneel, or crouch.
- 2. Employee must occasionally lift and/or move up to 20 pounds. Specific vision abilities required by this job include close vision, distance vision, peripheral vision, and depth perception, the ability to adjust focus.

WORK ENVIRONMENT: Work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- 1. Employees generally work 80% indoors and 20% outdoors.
- 2. The work environment indoors is usually in a temperature-controlled office; some travel is required.
- 3. While performing the duties of this job outdoors, the employee occasionally works in varying weather conditions, visiting developed and undeveloped sites in various stages of construction.
- 4. Noise level in the work environment is usually moderate but the employee may occasionally be exposed to high level noises including but not limited to outdoor construction equipment.